Appeal of:
PLANDEL, INC. : HUDBCA Nos. 92-7171-Cl
92-G-7478-C3 92-G-7478-C3
FEMA Contract No. EMV-90-C-0250

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Opinion by Administrative Judge Timothy J.Greszko

May 26, 1993

Statement of the Case

These appeals were received by the Board on October 16, 1991 and December 26, 1991, and arise out of constructive denials of the claims of Plandel, Inc. ("Appellant") by the contracting officer of the Federal Emergency Management Agency ("FEMA" or "Government"); the contracting officer failed to issue final written decisions within sixty days of submission of these claims by Appellant. The claims arise under FEMA Contract No. EMV-90-C-0250, awarded September 30, 1990, for construction work at the FEMA Special Facility in Berryville, Virginia. Appellant filed claims with the contracting officer totaling $39,298.00 that are the subject of the first appeal, which result from alleged changes and delays relative to the installation of a "screen room." Appellant's second appeal in the amount of $45,222.00 arises from the denial of claims by the contracting officer for moneys allegedly wrongfully withheld under the contract, delays, constructive acceleration, and extended overhead. The second appeal is also related, in part, to delays allegedly attributable to the installation and testing of the screen room. Only entitlement is at issue in this proceeding.

Findings of Fact

Background

1. On August 24, 1990, Solicitation EMV-90-C-0250 was issued by FEMA to all prospective bidders for the Building 219 addition. The contract for the construction of the building, subject to the contract's options, was awarded to Appellant on September 30, 1990, in the amount of $1,010,000.00. A Notice to Proceed was issued to Appellant on October 16, 1990. Appellant received the Notice to Proceed on October 19, 1990. The contract called for a total period of performance of 300 days from the date of the notice to proceed. (AF, Tab 2A; Tr. 696.)

2. Section B.1 of the Contract Schedule sets forth the Scope of Work. (Appeal File, Tab 2). Section B.1.1.2., Pre-engineered Metal Addition, provides in pertinent part:

> The addition shall be designated Building 219A and shall be a pre-engineered metal structure. Building 219A shall be located at a 90 degree angle to Building 219 and the two structures shall be connected by an entrance/loading dock cover with a metal roof and walls. Building 219A shall be 90 ft. long by 50 ft. wide with a 16 S ft. eave height. . .

3. Section G.1, Contract Administration, of the Contract Schedule designates Mike McPeak ("project officer") as the project officer. Section E.1, Authorized Representative, designates the project officer as an authorized representative of the contracting officer, Antoinette Affleck ("contracting officer"), to perform inspection for acceptance of materials and services to be provided. Under Section E.2(d) of the contract, the project officer is not authorized to change any term or condition of the contract without the contracting officer's written authorization. Under Section E.2(f) of the contract, the contractor is required, without charge, to replace or correct work found by the Government not to conform with the contract requirements, unless otherwise agreed. (AF, Tab 2A.)

4. Section F.8, Submittals, of the contract contained the following relevant provisions:

> b. Submittal Procedures:
>
> * * * * *

(3) Contractor Certified Submittals: Three (3) sets of all contractor certified shop drawings, material lists, catalog cuts, and equipment lists shall be submitted by the Contractor to the Project Officer not less than two weeks prior to the procurement of such materials, equipment, etc. Such submittals will be accepted for information purposes only. All samples of materials submitted as required by these specifications shall be properly identified and labeled ready for identification, and upon being certified, stored at the site of work for jobsite use until all work has been completed and accepted by the Project Officer. . .

(4) Certificates of Compliance: Any certificates required for demonstrating proof of materials with specifications requirements shall be executed in four (4) copies. Each certificate shall be signed by an official authorized to certify on behalf of the manufacturing company and shall contain the name and address of the Contractor, the project name and location, and the quantity and date of the shipment or delivery to which the certificates apply. Certificates of compliance shall be submitted, to the Project Officer, ten (10) days prior to the use of the material in the project.

c. The Project Officer shall review all submittals and return to the Contractor, within 14 calendar days, a statement signifying approval/disapproval of the submittals. (AF, Tab 2A.)

5. Under the quality control provisions of the contract, the contractor was required, *inter alia*, to furnish FEMA with daily quality control reports, in accordance with an attached sample form. The sample form included a remarks section for "Changed Conditions/ Delays/ Conflicts."(AF, Tab 2A, p. E-9.)

Screen Room Claims (changes and delay)

6. Appellant was required under the contract to procure and to install a screen room. The purpose of a screen room is to prevent radio waves of certain frequencies from entering or exiting the screen room. The screen room falls within Section 16415 of the Specifications, entitled "ELECTRICAL WORK, INTERIOR." Applicable portions of that specification follow:

> 2.3 Standard Products: Material and equipment shall be a standard product of a manufacturer regularly engaged in the manufacture of the product and shall essentially duplicate items that have been in satisfactory use for at least 2 years prior to bid opening.
>
> * * * * *

3. APPROVAL OF MATERIALS AND EQUIPMENT: Materials and equipment will be approved based on the manufacturer's *published* data. (italics supplied).

* * * * *

3.3 Shop Drawings: Shop drawings shall be submitted for approval in accordance with the SPECIAL PROVISIONS and shall consist of a complete list of equipment and materials, including manufacturer's descriptive and technical data; catalog cuts; and any special installation instructions that may be required. Shop drawings shall show applicable schematic diagrams; equipment layout and anchorage; and conduit and cable runs, anchorage and support.

* * * * *

23. Contractor shall provide, install, and test (per manufacturer's instructions) a double (electrically isolated) ["DEl"] prefabricated shielded enclosure equal to Standard Model 22 as manufactured by Lindgren. . . . Enclosure shall be of *bronze screen wire* and shall be approximately 10-feet wide by 14-feet length by 8-feet high. It shall have a 36-inch wide by 7-foot high personnel door, two wave guide air vents, vinyl tile over subflooring and ground bus. A removable brass connector panel shall be provided for customer's connections. Electrical filters shall be provided for a 30 Amp (three phase) electrical panel which have a CPS-rating of 0-400 Hertz, with a 150 kHz - 10 Ghz frequency range and a minimum attenuation of 120 dB (and rated 250 VAC/600 VDC maximum). An exhaust fan with variable speed control switch and two incandescent fixtures shall be installed in the enclosure for ventilation and lighting. Enclosure shall be skid constructed in such a manner as to allow unit to be moved across a concrete floor with power connections being made of in-line plug and receptacles for easy disconnection. An incline type removable ramp shall be provided to allow cabinets with casters to be moved without lifting into the screen room. (AF, Tab 2B) (italics supplied.)

7. Appellant's original intent was for its electrical subcontractor, Division 16, to include the screen room in Division 16's quote. However, on the day of bid opening, September 24, 1990, Appellant learned that Division 16 was not going to include the screen room in their quote. There is no evidence in this record with respect to whether Division 16 ever intended to include a screen room in its bid. (Tr. 58-9.)

8. Appellant received a quote in the amount of $17,803.00 (excluding installation and testing) from Lindgren on the Model 22 screen room on September 21, 1990, three days prior to bid. The Lindgren quotation included its 120 dB rated filter with a CPS rating of 0- 400 Hz and set forth the manufacturer's specification for attenuation for the screen room, which included 120 dB in the electrical range. It also advised Appellant of the anticipated delivery schedule which would be about 4-6 weeks after receipt of the formal purchase order and customer approval of drawings. The Lindgren literature stated that the Lindgren enclosure would provide 120 dB attenuation in the electrical range, 100-120 dB attenuation in the planewave range, and 50-80 dB of attenuation in the microwave range. (AF, Tab 4L, Tr. 59-60.)

9. Technology Environmental Control, Inc. ("TEC") was contacted by Appellant after bid opening for the provision, but not the installation of a screen room. A TEC quote for provision of a screen room, in the amount of $18,244.00, was received by Appellant on September 25, 1990, after bid opening. TEC accepted and signed the subcontract on December 17, 1990. The TEC proposal was submitted to FEMA by Appellant by transmittal 16-9 dated March 29, 1991. TEC sent the wrong filter information to Appellant in its proposal. Prior to making that submittal, Appellant knew that the TEC proposed filter, which was rated at 100 dB, did not meet the specified rating of 120 dB. (AF, Tabs 4D, 4L; Tr. 53-54, 62, 118.)

10. FEMA disapproved the submittal four days later by memorandum dated April 2, 1991. The memorandum states, in relevant part, that:

> 1) The enclosure is required to be constructed with bronze screen *wire* in lieu of solid steel panels. The enclosure requires the see-through and hear-through characteristics of a screen room; (2) The enclosure is required to be skid constructed to allow the entire unit to be moved across the primary building floor; (3) An incline-type removable ramp is required to allow cabinets with casters to be moved without lifting into the screen room enclosure; (4) The enclosure and electrical filters shall provide a minimum attenuation requirement of 120 dB. The shielding performance of the enclosure was not submitted and the proposed filter is only rated at 100 dB; (5) The enclosure is required to be equipped with an exhaust fan with variable speed control switch and two incandescent fixtures; (6) Power connection and wiring details shall be submitted for approval; and (7) The enclosed flooring is required to have a vinyl ti1e floor in lieu of

sheet vinyl for durability. (AF, Tab 4D.) (underscoring in original.)

11. On April 25, 1991, Appellant received a letter from TEC which addressed the points raised in the FEMA memorandum dated April 2, 1991. The TEC letter stated that TEC could build a screen room which met the requirements of the specifications, except for the double electrically isolated feature. The letter also stated that the original TEC quote met the RF attenuation requirements of NSA standard 65-6 (100 dB), which is considered to be the industry standard by the majority of Government and private sector users. By memorandum dated May 2, 1991, the FEMA project officer informed Appellant that:

Prior to resubmittal of the proposed screen room, Plandel shall verify and certify that the screen room complies with all contract requirements. Based on the preliminary information included in the [TEC letter dated April 23, 1991], it does not appear that the screen room is an equal. The enclosure must be a standard product meeting Specification Section 16415. paragraph 2.3. The screen room must be equal in performance to the Lindgren Model 22. A single mesh shield or a non-isolated double mesh enclosure would not meet the attenuation requirements satisfied by a double-isolated enclosure at the higher frequencies. The Screen room must be equipped with components equal to the quality and performance of the Lindgren model specified. The contract specified a double electrically isolated screen room and electrical filters which provide specific well documented levels of performance. The contract did not specify an RF enclosure of any construction meeting NSA Specification 65-6. (AF, Tabs 4E, 4F.)

12. Appellant requested guidance from FEMA with respect to the acquisition of the screen room. Robert Wilson, a FEMA engineer, had a telephone conversation with an employee of Universal Shielding Corporation ("USC"), a company that manufactures screen rooms. Wilson informed USC that FEMA was looking for a screen room with the general traits that Lindgren offered. Wilson spoke with Irwin Newman of USC about the USC Model 44 screen room. Wilson indicated on the phone that the USC 44, as described by Newman, appeared to meet FEMA's needs. Wilson did not inform Newman during the telephone conversation that the USC 44 was equal to the Lindgren model, because he did not obtain sufficient information during that conversation to render such a judgement. (Tr. 7-8, 518-21, 539-40.)

13. A meeting was held on May 16, 1991, at FEMA, which was attended by Eden and Dave Lamberson on behalf of Appellant, and Zebarth, Wilson, and the project officer on behalf of FEMA. At the meeting, Appellant pointed out that it believed that only Lindgren could supply the DEl feature, because it appeared to be a patented feature. FEMA agreed to provide Appellant with information with respect to other screen room manufacturers. Eden asserts that he left the meeting apparently believing that FEMA had agreed to provide him with the names of screen room manufacturers whose products could meet FEMA's requirements. FEMA personnel left the meeting believing that they had only agreed to supply Appellant with the names of screen room manufacturer's, and that it was Appellant's duty to determine if those manufacturer's could supply FEMA's needs. FEMA provided Appellant with the names of ARK Electronics and Universal Shielding Corporation as potential sources for screen rooms. (Tr. 15-16, 566-70, 775; AF, Tab 4G.)

14. Appellant determined that ARK was no longer in business, and obtained a quote from USC on May 24, 1991. On May 28, 1991, USC sent its quote to Appellant. The quote was in the amount of $14,723.00. (App. Exhs. B, C.)

15. By letter dated June 7, 1991, FEMA requested that Appellant provide a proposal to delete the screen room from the contract, because Appellant was having difficulty with this aspect of the contract, and because the screen room was not critical. Appellant submitted a deductive proposal to FEMA on July 3,1991. Appellant based the credit due FEMA on the quote received from USC. Eden testified that Appellant utilized the USC quote for the credit because he believed that FEMA had "unofficially" accepted the USC screen room. There is no evidence with respect to the amount that Appellant included in its bid for the screen room, but the only quote that it had obtained at the time when it submitted its bid was the Lindgren quote in the amount of $17,803.00. (AF, Tab 4J; App. Exh. C; Tr. 19, 517.)

16. The next discussion between the parties regarding the screen room came at a meeting on July 11, 1991. Although an internal memorandum dated July 7, 1991, from the project officer to the contracting officer, recommended that the credit for the screen room be negotiated upwards, neither party pursued the negotiation of the credit. At FEMA's request, Appellant provided copies of its USC quotation and Appellant also provided FEMA with the documentation for the USC screen room shortly thereafter. (AF, Tab 4K, 4L, 4N; Tr. 22 (3/17]; Tr. 22-23.)

17. By memorandum dated July 15, 1991, the project officer stated that the proposed USC screen room did not meet the contract requirements for the following reasons:

> a) The Model USC 44 Attenuation Performance curve was obtained from the manufacturer. The unit does not have equal attenuation characteristics as compared to the Lindgren unit. The shielding effectiveness of 100 dB in the frequency range of 14 KHz - 1 GHz is not equal to the 120 dB shielding effectiveness required.
>
> b) The proposed filter is not rated for a minimum attenuation of 120 dB as required by the contract.
>
> c) Certification was not provided showing that the filters have a CPS-rating of 0-400 Hz over the specified frequency range.

The USC quote did not state that it would meet the 120 dB range in the electrical field. Filters are not an integral part of the screen room and can be exchanged easily. We find that the USC quote, as presented to the project officer, did not meet the requirements of the contract, because it did not appear to meet the attenuation characteristics of the Lindgren Model 22 in the electrical range. (AF, Tab 4M, 4A, 4B; Tr. 146-47, 151, 154-56, 173-74.)

18. By letter dated July 18, 1991, the contracting officer determined that the screen room would not be deleted from the contract and that Appellant was to provide the screen room within the original contract period. (AF, Tab 4N.)

19. Shortly thereafter, Appellant contacted Lindgren, asked Lindgren to prepare materials for a submittal, and requested a delivery date that would permit completion of the contract by the end of the contract period. Lindgren replied by letter dated July 31, 1991, that a realistic delivery date was September 20, 1991. The appropriate submittal was made to FEMA and accepted. The screen room was delivered by Lindgren on September 27, 1991. (Tr. 28-30 [3/17].)

20. The screen room was installed by Appellant's subcontractor, ATEC Industries, and tested by another subcontractor, Advance Measurement Systems ("AMS"). Testing was completed on October 11, 1991; a report was issued by AMS dated October 23, 1991, which was forwarded to FEMA. The report states that the room met the minimum levels of attenuation as specified

by Lindgren, at the minimum frequency in each of the relevant fields. (AF, Tab 17.)

21. The project officer sent a letter to Appellant dated November 21, 1991, with respect to the screen room. The letter states, in pertinent part, that:

> On November 19, 1991, I performed a follow-up test on the screen room furnished and installed under the subject contract... The tests clearly indicate that the inner and outer shields are not electrically isolated as required for the enclosure to perform to its full potential.
>
> In addition, numerous connector plate bolts and T-nuts were found to be galled. Seven bolts were replaced; however, one bolt and T-nut assembly is galled severely, and the bolt could not be extracted with a wrench. This bolt must be removed and replaced. The bolts were evidently excessively torqued.
>
> Submittal No. 16-9A clearly states that the shields must be electrically isolated. In paragraph 1.0 General Requirements of Section 3.0 on page 3.2, the submittal states "All components shall maintain isolation between shields." Section 22.0 Assembly and Maintenance Instructions of the submittal requires that the unit be continuously monitored during assembly to ensure inner and outer shields are not shorted together. The installers did not utilize a meter during assembly as required. The installers also assembled the unit out of sequence. The assembly instructions require the flooring system to be installed before the third and fourth walls are erected. Please refer to page 22.9 of the submittal. The Installers assembled the finish floor as the last step after final testing was performed. The specifications specifically require the testing to be performed after assembly is complete. In addition, on page 22.16 of the submittal, the second most important condition to proper performance "is the electrical separation of the inner and outer shield over all points: doors, air vents, connectors, filter panels, wall panels, ceiling panels, floor panels, WITH THE GROUNDING BOLT REMOVED, of the Double Electrically Isolated Room." Final acceptance of the screen room will not be made until the inner and outer shield are properly isolated and final tests are submitted to certify that the complete assembly performs as specified. (AF, Tab 18.)

22. Appellant forwarded the project officer's November 21, 1991 letter to ATEC and to the Lindgren representative. The ATEC representative responded by letter dated December 3, 1991, and characterized most of the project officer's comments as "knitpicking," and expressed the opinion that the isolation problem with the screens would have little impact on the performance of the screen room. ATEC agreed to resolve the bolt problem and agreed to accompany Lindgren factory personnel to the jobsite to help find and correct the dielectric problem with the screens. ATEC denied that the screen room was not properly assembled. Lindgren responded to the project officer's November 21, 1991 letter by letter dated December 30, 1991, and expressed the opinion that the screen isolation problem was insignificant, since the room had met its minimum specifications. By letter dated February 19, 1992, FEMA directed Appellant to isolate the shields of the screen room. On March 13, 1992, upon further inspection of the screen room, a short circuit was found between two floor panels and in the door latch. These problems were resolved by ATEC, and were attributable to both the manufacturing and the assembly processes. (AF, Tabs 2A, 22; App. Exh. 0; Tr. 37 [3/17], 587-90.)

23. The screen room is not on the critical path and is not a critical item. Appellant claims that it is entitled to delay costs relative to the installation of the screen room on the grounds that FEMA rejected two equal or potentially equal screen rooms. (AF, Tab 11.)

24. Evidence was presented at hearing by representatives of TEC and USC which appears to demonstrate that the TEC and USC screen rooms had the potential to meet the FEMA specifications. This evidence was not presented to the project officer at the time of the rejection of these proposals. (Tr. 5-48, 101-35; AF, Tabs 4D, 4E, 4M; App. Exh. L.)

Foundation Design Delay Claim

25. A note in the contract drawings required the contractor to check the walls for overturning (tipping inward or outward), prior to commencing the work. Upon award of the contract, Appellant forwarded the appropriate drawings to a structural engineering firm so that the foundation design could be checked for overturning. (AF, Tab 4-2C, Plate 5-1; Tr. 179, 747.)

26. Appellant's structural engineering expert, James Konnick, reviewed the drawings for Appellant to check the foundation design. Konnick is a civil engineer who has been practicing in

the field of structural engineering since 1975. He has been a registered professional engineer since 1980, and engaged in private practice since 1985 in his own firm JGK Structural Engineering. Konnick stated that he has "done quite a number of pre-engineered buildings." Konnick was engaged by Appellant during the early stages of the contract to evaluate the drawings for structural problems. After performing the analysis of the foundation, Konnick concluded that the design of the building, which called for the utilization of a tension cable to resist forces such as those brought about by a snow load, was insufficient to resist extreme compressive forces which might be brought about by the wind load or other overturning forces. It was also Konnick's opinion that the cable design proposed by FEMA imposed a load on the pre-engineered building rather than the foundation, which would have required the pre-engineered building manufacturer to provide a specialized design, rather than its standard product, contrary to both industry standards and the contract requirements. Konnick recommended certain changes to the design of the building, which he stated were necessary for safety reasons as well as to prevent the possibility of cracks developing in the foundation wall over the long-term from the stress of wind loads, which could then lead to water leaking into that part of the building which is below grade. He recommended replacement of the tension cable with a structural beam that would take both tension and compressive loads, and elimination of the load imposed on the building by shortening a rigid frame column 48 inches and designing a concrete pedestal to be 48 inches higher. (Tr. 180-183, 192, 254, 768-71; Complaint 1, Exh. U; AF, Tab 4-2B, paragraph 13120-5.)

27. Konnick and Jack Eden, Appellant's president, met with FEMA representatives on November 6, 1990, to discuss the recommended design changes. FEMA verbally agreed to the recommended changes at the November 6,1990 meeting, and Appellant delivered "red-line" drawings incorporating those changes on November 26, 1990. Apellant sent a letter to the contracting officer dated November 29, 1990, and stated in that letter that "if FEMA concurs with [the changes recommended by Konnick], we [will] then proceed with its implementation and production of necessary shop drawings at no additional charge to the contract amount." (Tr. 183; AF, Tab 5A.)

28. The cost to Appellant for the design changes was *de minimus* and he submitted no request for additional costs. The contracting officer accepted Appellant's proposal by letter dated December 3, 1990, with the understanding that Appellant's proposal included "all engineering, shop drawings, as-built drawings,

labor, equipment and materials at no additional cost to the Government." (AF, Tab SB.)

29. Roger Zebarth, FEMA's Chief of Engineering Design Branch, is a civil engineer with a background in civil and structural engineering, and is a registered professional engineer. Zebarth supervised the design of Building 219A. Zebarth met with Konnick and Eden on November 16, 1990, to discuss Konnick's proposed design changes. Zebarth believed that the original design of Building 2 19A was not defective and that the changes which Appellant proposed to the structure were unnecessary. Zebarth did not receive any design calculations from Appellant or Konnick in support of the design changes recommended by Konnick. It is Zebarth's opinion that Konnick's conclusion was incorrect that the foundation wall would break-off and overturn at an inward acting wind force of 7000 pounds. Zebarth testified that the dead load, essentially the weight of the building on the columns at issue, was about 17,098 pounds, and that the live load attributable to snow and an auxiliary load resulted in a most severe loading condition of about 26,000 pounds on the columns. Zebarth stated that the walls would "tip out" at a load of about 17,100 pounds and that the purpose of the cable was to hold the foundation walls in. Zebarth stated that FEMA had built several other buildings utilizing this cable design. Zebarth stated that the cable is typically located at the slab, but that in this case, because the building had three levels, the cable was moved up four feet from the slab. Zebarth admitted that manufacturers "had trouble with this" because they rely heavily on computer analysis and computer programs, and find it difficult to put loads anywhere other than at the foot of the column.

With respect to lateral wind loads, it was Zebarth's opinion that a 7000 pound wind load would not cause the foundation column wall to either break or tip over, for a number of reasons. Zebarth provided detailed engineering calculations which indicated that the internal strength of the wall and column was sufficient to withstand approximately two times the force that Konnick stated would overturn the wall.

Zebarth concluded that although the original cable design was satisfactory, the beam design proposed by Appellant was also satisfactory, although somewhat more conservative. Zebarth stated that FEMA accepted Appellant's proposed design change because it was acceptable, because Appellant proposed to do it at no cost to the Government, and because Appellant mentioned nothing about extending the period of performance. Appellant presented no technical evidence to rebut Zebarth's engineering calculations

that the original design was satisfactory. (Tr. 740-63; Govt. Exhs. 40-44.)

30. Eden claimed that the project was delayed twenty-one days by the foundation and cable design change. Eden admitted that these design changes would have made a negligible difference in material costs and no difference in the time of performance. He attributes twelve days of this delay to the fact that the concrete subcontractor was twelve days late in starting work on the concrete footings, and that this work could not have started earlier because relevant shop drawings for the footings had not been approved before that date. Eden attributes the remaining nine days of delay to the fact that the second floor structural steel, which he asserts should have been used first, was delivered to the site approximately ten days after steel erection began. Eden stated that this steel would have been delivered earlier, but for the requirement for the redesign of the foundation, which required the submission of both red-line drawings and shop drawings. He recalled that the shop drawings, which were prepared by Arlington Iron Works, were about two weeks in the making, and that Plandel expeditiously provided the necessary information to Arlington Iron Works. (Tr. 187, 357-58, 698-700, 714, 716; AF, Tabs SB, 24, p.16; App. Exh. M.)

Security Delay Claim

31. Contract clause H. 1, Identification of Employees and Access to the FEMA Special Facility, sets forth the security requirements of the Contract. Subsection H. l.a identifies the FEMA Special Facility as a controlled installation not open to the general public and states that the Special Facility contains a special access area permitting entry only upon a security clearance and a need-to-know basis. Subsection H. 1 .b further identifies the facility as an area requiring control by a badge entry system. Subsection H.1.c. requires the contractor to submit certain information on personnel it desires to have access to the special facility. This information is then used to conduct a police name check. If the police check is not favorable, subsection H.1.d provides that the contractor must allow "at least 10 calendar days prior to the need to enter the facility for the police check." Appellant was aware of the 10-day requirement for the security checks. Although these provisions were also contained in the past contracts that Appellant had performed, the security procedures followed under the contract were different from those practiced under the previous two contracts. In the past, it took less time for the security checks to be completed. However, because of the involvement of the United States in the Persian Gulf, which

included both Desert Shield and Desert Storm, more thorough checks were being conducted for every individual who needed access to the site during the performance of the contract at issue. This process often required the entire 10-day period allowed under the contract. (AF, Tabs 2A, 7G; App. Exh. F; Tr. 215, 218-21, 735-6; 362-64, 707.)

32. The security delay issue was raised at the May 16, 1991 meeting. Eden stated at the meeting that, on one occasion, the employees of steel erector, Total Construction Services, were not approved within the "required 10 day period." Upon checking the security delay claim, the project officer was informed that the employees at issue had not been barred from the site for more than ten days, that the problem was the result of a miscommunication, and that the situation was actually resolved within a matter of hours. (Tr. 598-9.)

33. Starting with the concrete subcontractor (Lisbon Concrete), in December, 1990, FEMA would not approve anyone for admission to the site who was not a U.S. citizen. The contract was silent on this issue. At least six employees were denied access to the site because of this restriction. (Tr. 220, 363, 708-9; App. Exh. K.)

34. In an internal memorandum, the Project Officer revealed to the contracting officer that Appellant had probably lost time because of the strict security procedures, but FEMA did not grant any time to Appellant on that account. (AF, Tab 4-7G.)

35. By letter dated July 15, 1991, Appellant informed the contracting officer that the security procedures had resulted in a ten day delay. (Tr. 718-19, 598-9; Complaint Cl, Exh. T, ¶ 5 of attachment.)

36. On October 10, 1991, the contracting officer denied the security delay claim because Appellant had failed to submit sufficient information to substantiate its claim. (Appeal File, Tab H.)

Gutter Design Delay Claim

37. Appellant submitted a claim to the contracting officer dated July 15, 1991, claiming a seven day "Delay in delivery of pre-engineered steel until design changes had been approved for the parapet gutter condition." (Exh. T, Complaint Cl.) Appellant raised the same claim by letter to the contracting officer dated

June 6, 1991, which did not attribute a specific number of days of delay to this claim. (AF, Tab SC.)

38. By memorandum to the contracting officer dated July 3, 1991, the project officer responded to the allegation contained in the June 6, 1991 letter from Appellant. The memorandum stated that:

> As previously addressed, the Contractor chose to deviate from the contract documents with regard to the gutter. Therefore, any delay incurred was due to the Contractor's actions. The Contractor is required to make shop drawing submittals 14 calendar days prior to the need for approval. The Project Officer returned the shop drawings of Transmittals 13-1, 13-2, and 13-2a in 4, 6, and 1 calendar days respectively from receipt. The Contractor took three and one-half (3 1/2) months from notice to proceed to submit all necessary product data, shop drawings and design calculations. The late start date for Activity No. 13 - Steel Erection was January 5, 1991, as shown on the approved construction schedule. However, the Contractor did not submit the shop drawings for the steel building until (Transmittal 13-2) January 9, 1991. No additional compensation or time extension is justifiable with regard to this claim. (AF, Tab SD.)

An earlier memorandum to the contracting officer from the project officer dated May 21, 1991 stated that:

> . . .[A]s clearly shown by transmittal Nos. 13-2, 13-2A and associated FEMA COMMENTS, the contractor proposed the parapet gutter and insisted on its use including interior downspouts with no mention of additional cost. As the Project Officer, I rejected the parapet gutter design included in Transmittal No. 13-2. I approved the Contractor's proposal, for the alternate gutter, after it became evident that the Contractor's anchor bolt placement in the foundation would not allow a valley gutter as specified... The contractor should solicit [B]uilding [T]echnologies, (the building manufacturer) for any additional cost due to their insistence to deviate from the contract documents. (AF, Tab 6F) (underscoring in the original.)

39. Appellant's Submittal 13-1 dated November 30, 1990, contained information on the proposed gutter, but did not contain any information about the alternate parapet gutter that Appellant ultimately insisted upon. Appellant was still required to make a submittal with all necessary shop drawings in proper form with all

the required documentation. Submittal 13-1 was signed on December 6, 1990. Submittal 13-1 contained anchor bolt details which were approved by the project officer to verify how the concrete was to be poured. The project officer thought at the time he approved the submittal that Appellant's proposed anchor bolt details were going to allow the building to be constructed as originally designed and for the gutter that was identified in Submittal 13-1. (AF, Tab 12; Tr. 264, 666.)

40. Appellant submitted shop drawings and other required documentation on January 8, 1991, in its Submittal 13-2. This submittal was disapproved by the project officer on January 15, 1991. The gutter and downspout items were among twelve enumerated reasons for the disapproval of the proposal. Pertaining to the gutters and downspouts, the FEMA comments state:

> 8. Sheet D3: Detail 23 is disapproved. This detail does not comply with the required gutter alignment and detail. Please see details and sections referenced by Note 5.(e) contained herein.
>
> 9. Downspout and gutter sizes have not been identified. Downspout locations have not been shown with back-up calculations showing compliance with drainage capacity requirements. See Section 13120 paragraph 1.4.5 (AF, Tab 13.)

41. Building Technologies Corp. ("BTC"), the manufacturer of the pre-engineered building, sent a letter to Appellant dated January 22, 1991, which addressed the project officer's comments of January 11, 1991. This letter states, in relevant part, that:

> (5)(e) The centerline to centerline dimension from column lines 6 to 7 were specified by Plandel, Inc. tQ accommodate the 13'-0" wide CFO (commercial frame opening) in column line A and to satisfy the foundation conditions. The parapet gutter was then detailed and located in compliance with the aforementioned
> conditions.
>
> * * * * *
>
> (8) Regarding the disapproval of detail 23: I can find no structural or aesthetic problems with the parapet gutter support and location as it has been detailed. The downspouts (4" x 3" in cross-section) can be located between the partition panels. This will require passing the downspouts through the partition girts. Stiffeners are to be field welded on either side of the downspout to ensure shear

transfer through the girt web at these locations. Note that these girts are only carrying a line load of 0.0225 kips/ft. This produces a max. shear value = 300 lbs. and a max. moment = 1.8 ft.-kips. The reduced section will be adequate to carry these loads. Also, all of the connections for the parapet gutter details are fully sealed to prevent water leakage. The detail shown on plate A-8, wall section 11 is not recommended by Building Technologies because of vertical support problems.

(9) The downspout spacing is determined from the charts I have enclosed (accessory pages 4 and 5) with this letter. (AF, Tab 14.)

42. As a result of FEMA's rejection of Appellant's shop drawings, and bad weather, Appellant put his steel order on hold for approximately twenty days. The building steel was delivered on January 30, 1991. (Tr. 187, 705; App. Exh. J.)

43. Early in the project, Appellant recommended to FEMA that the downspouts that were to be connected to the re-designed gutter be moved from the outside of the building to the inside of the building into a heated environment, to prevent the downspouts from freezing during the winter. FEMA approved this request at the time it approved the re-designed gutter. (Tr. 194-95; AF, Tabs 6E, F, G.)

44. Appellant's submittal 13-2A, which included by inference two interior downspouts but lacked any detail showing how they would be installed, was submitted on January 29, 1991; It was approved on January 31, 1991 and included the redesigned gutter detail. At the time Appellant furnished submittal 13-2A, it made no request for additional costs. The project officer approved the redesigned gutter because if he did not approve it, either the entire foundation would have to be redone, or the anchor bolts cut-off and replaced. Appellant's architect, James Koleszar, stated during the hearing that the gutter design choices made by BTC for Appellant were necessary and a good design, and that the anchor bolt layout was not incorrect. (AF, Tab 14; Tr. 127, 437-57; 667-68.)

45. By letter dated March 11, 1991, FEMA requested, in a proposal to Appellant, that Appellant perform several additional items of work. These included the installation of an additional 3" x 4" interior downspout which would match the approved downspouts in material and finish, to include a PVC sleeve for the floor penetration, 6-inch Schedule 40 PVC under-slab drainage pipe

and PVC fittings to connect the proposed downspout flow into the downspout drainage system. Appellant submitted a proposal for two interior downspouts on April 2, 1991, because it had been determined that three downspouts would not fit into the designated space. Appellant proposed that the work be performed at a cost of $2,096.00 and requested a seven-day extension of the contract to accomplish this work. (AF, Tabs 6A, 6B.)

46. By memorandum dated April 15, 1991, the project officer recommended that the contracting officer reject the downspout proposal, because the contract originally required the installation of two downspouts, and because the project officer believed that the parapet gutter problem was caused by Appellant's anchor bolt layout. The memorandum also stated that Appellant had not mentioned any additional cost to perform this work at the time Submittal 13-2A was approved by the project officer. The contracting officer rejected Appellants downspout proposal by letter dated April 22, 1991, and directed Appellant to proceed with the contract in accordance with the original plans and specifications. (AF, Tabs 6C, 6D.)

47. Appellant requested reconsideration of the denial of his proposal by letter dated April 24, 1991, which stated that the cost in the proposal was for the installation of under-slab PVC piping for the two interior downspouts, which had already been approved. By letter dated June 7, 1991, the contracting officer again rejected Appellant's proposal. The contracting officer's letter did not address Appellant's request for a seven-day extension. (AF, Tabs 6E, 6G.)

48. Ultimately, the contracting officer did not force Appellant to perform to the original design for the downspouts. Appellant's claim concerning the downspouts is limited to seven days of delay, the time it asserts was associated with the installation of the extra PVC piping under the slab for two interior downspouts. Appellant failed to produce any evidence of delay associated with this work. (App. Brief, p. 17.)

Weather Delay Claim

49. Appellant's construction schedule, which was approved by the project officer, showed the concrete work on the foundation being performed from November 19 to December 21, 1990. Appellant actually finished the concrete work on January 21, 1991. During the scheduled days for pouring concrete, Appellant expected to have to use some weather protection to pour concrete. The

contract required that both the air and the forms in contact with concrete be maintained at a temperature above 50 degrees Fahrenheit for the first three days of the cure period, and at a temperature above 32 degrees Fahrenheit for the remainder of the specified cure period. The specifications provided a 3-day cure period for Type III cement, and a 7-day cure period for Type I, II, IP or IS cement. There is also a contract requirement to protect the curing cement from premature drying extremes in temperatures, rapid temperature changes, mechanical injury and injury from rain and flowing water. The weather reports for November 19, 1990 to December 21, 1990 show 1 day where the temperature did not go below 50 degrees, 15 days on which the temperature did not go below 32 degrees, 12 days on which rain fell, and no days on which frozen precipitation fell. The weather reports for the period December 22, 1990 to January 21, 1991, show 1 day on which the temperature did not go below 50 degrees, 4 days when the temperature did not go below 32 degrees, 8 days on which rain fell, and 14 days on which frozen precipitation fell and measurably accumulated. (AF, Tabs 2B, Sec. 20.1, p. 03300-17 and Sec. 20.4, p. 03300-18; AF, Tabs 3A, pp. 24-25, 9, 11; App. Exh. J.)

50. The need for weather protection measures was potentially greater during the period December 22, 1990 to January 21, 1991, than during the period November 21, 1990 to December 21, 1990, because the later period was colder, and because more precipitation fell. It also appears that working conditions were more difficult during the later period because of accumulated snow and ice on the site. Appellant requested a twenty-one day time extension for weather-related problems in the later time frame. (AF, Tab 3A, pp. 25-26; Tr. 187-89, 361.)

51. Appellant's initial allegation of weather-related delay is set forth in a letter dated June 6, 1990, to the contracting officer. That letter states, in relevant part, that the project is running about 45 days behind our construction schedule" based on a number of factors, including "-More than normal delays caused by winter and rainy weather during the time-frame of foundation concrete work, which was itself delayed to an inclement weather period due to previous design changes." The letter requested a 45-day contract extension to October 2, 1991, with an attendant negotiated compensatory allowance for incurred project overhead costs, and stated that supporting information would be furnished upon request. (Complaint C3, Exh. F.)

52. In response to Appellant's letter, the project officer advised the contracting officer that:

> The only design changes that were made were relatively minor and only [a]ffected the final foundation pours. Therefore, the design changes would not have caused any significant delay except that the Contractor was delinquent in producing the building shop drawings and associated foundation changes. The weather conditions during this contract have been warmer and dryer than average. Therefore, the Contractor has no justifiable claim for additional compensation or time extension with regard to this claim. (AF, Tab SD.)

53. The contracting officer denied Appellant's weather delay claim by a letter dated October 10, 1991. (AF, Tab 5H.)

Slab Bolster Delay Claim

54. The Critical Path Method ("CPM") chart for this project cites October 27, 1990 as the start dated for the construction of footings, which is listed as an item on the critical path. It allows twenty-one days for the performance of the footing work. Next on the critical path is foundation walls, projected to begin on November 19, 1990, for a period of thirty-five days. The next item on the critical path is the slab groundwork, which was scheduled to begin on December 22, 1990, for a period of fourteen days. On January 5, 1991, the steel and erection work was to begin. In relation to the slab groundwork, a non-critical path item is the on-grade slabs (No. 14 on the chart), which includes the pouring of the concrete. Slab groundwork was to be done in preparation for the pouring of concrete for the on-grade slabs. (AF, Tab 11.)

55. The footings were actually started on November 8, 1990, twelve days later than planned. Appellant testified that the footings were completed in the requisite twenty-one day period, which would be November 28, 1990. Appellant testified that the foundation work began immediately upon completion of the footings and that it was finished on January 21, 1991. The steel and erection material was delivered to the site on January 30, 1991. The slab groundwork was ongoing and then progressed concurrently with the steel erection work. The steel erection work began on February 5, 1991. Within a few weeks, Appellant terminated the original steel erection sub-contractor, Wescott Steel, for default, because Wescott was not cooperating with other subcontractors, had almost caused altercations, and because Wescott's crane was interfering with the sewer and water line installation work being performed for Appellant by Perry Engineering. The steel erection work was then subcontracted to

Total Construction (AF, Tab 24, Lisbon Payroll Records; Tr. 282-283,703-05.)

56. The purpose of a slab bolster is to support concrete reinforcing mesh or concrete reinforcing bar in a pour so that it does not drop to the bottom of the concrete floor. Slab bolsters were needed on this project because of problems that were encountered during the first pour, which the project officer characterized a "disaster." The concrete subcontractor's employees were attempting to pull the reinforcing or mesh up while the concrete was being poured, but they did not build any conveying system to reach those areas. As a result they were running wheelbarrows and other equipment across the reinforcing, and had nothing to stand on; they were walking through the area that they were finishing and the reinforcing was getting tramped down to the bottom of the concrete. The project officer discussed the problem with Appellant and the subcontractor and informed them that they needed to obtain slab bolsters or reinforcing chairs before proceeding further with the work. Appellant agreed, without comment, to use slab bolsters for this purpose, and Eden conceded at the hearing that slab bolsters were necessary to perform the work. (Tr. 639-40.)

57. Appellant raised the slab bolster delay claim initially in a letter to the contracting officer dated June 6, 1991, which asserted "Delays in completing the ground level and second level slabs until insulated slab bolsters could be obtained due to changes related to the installation of the signal reference grid." Subsequently, Appellant restated this claim in writing on July 11, 1991, and stated that the resultant delay was seven days. (AF, Tab C; Complaint C3, Exh. T.)

58. In response to Appellant's notification of delay, the project officer, in a July 3, 1991 memorandum to the contracting officer, advised as follows in paragraph 3: The Contractor contends that "delays [occurred] in completing the ground level and second level slabs until insulated slab bolsters could be obtained due to changes related to the installation of the signal reference grid." The Contractor made the first slab-on-grade pour on [March] 20, 1991. According to the approved Critical Path Construction Schedule, Activity No. 14 - On Grade Slabs was scheduled with the late start and late finish dates of February 5, 1991, and March 1, 1991, respectively. Therefore, the Contractor was 43 days behind schedule when he poured the first slab, in addition, this first pour was performed without the use of slab bolsters (reinforcement supports). The Contractor was informed that reinforcement supports were required prior to additional slab

construction and that insulated supports should be utilized to support the signal reference grid. It took seven calendar days for the Contractor to obtain both the insulated and uninsulated supports. If the Contractor is contending that uninsulated chairs were readily available the Contractor could have proceeded with the other slab pours without the signal reference grid. The Contractor has stated that he was not aware of the inherent requirement that a signal reference grid must be electrically isolated from the remainder of the reinforcement by insulated supports. In giving the Contractor the benefit of the doubt I would support issuing the Contractor a no-cost seven (7) day time extension with regard to this issue. Since the on grade slab activity was not on the critical path, the lost time procuring the insulated supports would not have impacted his schedule if the project was on schedule. (AF, Tab SE.) (emphasis theirs.)

59. At the hearing, Eden admitted that other work on the critical path was available to be done and was in fact performed during any alleged delay period. That fact is further verified by the testimony of the project officer that at the time Appellant had other work which could have been performed which was on the critical path. (Tr. 307, 644.)

60. The project officer recommended to the contracting officer that she grant Appellant a seven-day time extension out of leniency. The project officer recommended that the claim for delay costs be denied, because as other work on the critical path was available at the time, there was, accordingly, was no actual impact upon the completion date.
(Tr. 642-44.)

61. Based upon the recommendation of the project officer, the contracting officer granted a seven-day no-cost extension for the insulated slab bolster claim. That decision was transmitted to Appellant by letter dated October 10, 1991 and in unilateral contract modification No. M003. (AF, Tabs 2A, 5H.)

Drywall and Insulation Delay Claim

62. A dispute arose in May, 1991 during performance over the height of a certain fire wall, depicted on section 7, AL/A7 on Sheet A7 of the drawings. Appellant contends that as the wall appeared on the drawing to terminate approximately eight inches short of the roof panels, it appropriately built the wall to that height. The Government admits that the wall appears on the drawing to terminate at the height suggested by Appellant, but it contends that Appellant was required to build that wall to the

roof panels, because a note on the same drawing stated that the wall was to be composed of "2 layers 5/8" fire-rated gypsum board to the roof line, and because the wall was a fire-wall which had to extend to the roof-line to comply with the applicable fire code. Appellant admits that the drawing contained "contradictory details." The project officer instructed Appellant's on-site supervisor, on or about May 14, 1991, to extend the wallboard to the roof-line. Appellant refused to comply with this directive pending further guidance from the contracting officer. (Tr. 208-09, 660; AF, Tabs 2C, 7D.)

63. Another dispute arose at the same time concerning the method of installing batt insulation. Appellant subcontracted with Hart Insulation to install the insulation batts in the metal stud-walls. Hart was approximately 90 percent finished with the work when it was stopped by the project officer, who objected to the method by which the batts were being installed. The project officer stated that the insulation tabs were required to be taped to the face of the metal studs. The subcontractor was installing by the friction fit method. The project officer directed Appellant's superintendent, Ronald Mohr, to tape the tabs of the insulation to the face of the metal studs, so as to provide an uninterrupted vapor barrier in accordance with contract specifications 7.3 ("installation shall be accomplished in such a manner as to provide a continuous seal") and 7.4.2 ("tabs shall be fastened to the face of the framing member").

> The project officer informed Mohr that he was to proceed no further with the insulation without taping it. Mohr said that he would not proceed without contacting Eden. Eden testified at hearing that "We stopped the work. We stopped Hart Insulation from doing the work.... We just had to wait until we resolved this problem with FEMA." Eden attended a meeting with FEMA personnel on May 16, 1991, and stated that Appellant would not extend the drywall to the roof-line and that Appellant would not tape the insulation to the metal studs until the contracting officer rendered a written decision on these issues, because these items comprised changes to the contract. Appellant wrote a letter to the contracting officer dated May 23, 1991, requesting direction on these issues. The contracting officer informed Appellant in writing by letter dated May 31, 1991, to install the insulation as directed by McPeak and to extend the fire-wall at issue to the ceiling. Appellant complied with these instructions on June 3, 1991, the first day of work after the May 31, 1991, letter was sent. Appellant estimates that the cost of performing this work was approximately $1000.00. The

actual time that it took Appellant to redo the drywall and the insulation was two days. Appellant claims 21-days of delay, the period from May 14, 1991 until June 3, 1991. (Tr. 205-07, 320-322, 347, 351-52, 368-69, 381, 402, 436, 551, 680, 645, 657, 677, 679, 721, 790; AF, Tabs 2A, 7B; Govt. Exh 35.)

Fire Alarm Control Panel Delay Claim

64. During the installation and testing of the screen room, Appellant's electrical subcontractor was finishing the installation of the fire alarm system, when the subcontractor discovered on October 11, 1991, that certain Government Furnished Equipment ("GFE"), specifically, the fire alarm control panel module, was defective. FEMA supplied a replacement module, but that did not resolve the problem. On October 16, 1991, a FEMA employee completed work on the module, and also found a defective enunciator detector, which was not GFE. The electrical subcontractor rewired and tested the fire alarm system the same day. Other FEMA-directed personnel connected the fire alarm control panel to the master panel on October 17, 1991. On Friday, October 18, 1991, Appellant requested that the final acceptance test for the fire alarm system be scheduled for Monday, October 21, 1991. The final acceptance test was conducted on October 22, 1991. (Tr. 226-27, 230, 334, 521-24; Complaint C3, Exh E.)

65. Eden testified at the hearing that Appellant was delayed for several days as a result of the defective GFE. (Tr. 226.)

66. By memorandum dated October 30, 1991, the project officer provided the contracting officer with a memorandum dated October 31, 1991, which states, in relevant part:

> Secondly, the Contractor contended he was delayed in completing items B-i, B-2, and B-3 due to Government diagnosis and repair of the Government-furnished fire alarm control panel. The contract requires all Government-furnished equipment (GFE) to be delivered 90 days after notice to proceed. However, in this case, the Contractor did not want to take delivery of the panel components due to not having a satisfactory storage area with a conditioned environment. The Contractor requested and received the box on May 13, 1991, for rough-in purposes. And the Contractor requested and received the internal modules and components for the panel on August 13, 1991. The internal power unit, modules and other components were preassembled, prewired, and bench tested as a complete system prior to delivery to the

> Contractor. The Contractor did no[t] immediately install the unit and/or complete the zone wiring upon unit receipt. In fact the Contractor was delayed in installation of detection devices, pull stations, horns, and strobes, etc., due to late delivery of these items. The delivery of all necessary Contractor furnished items was not made until October 11, 1991. The Contractor also did not notify the Government that a problem was encountered with the GFE until Friday afternoon, October 11, 1991. A replacement module was issued to the Contractor that afternoon but did not solve the problem. Therefore, on Tuesday, October 15, 1991, Brendan Caputo, Electronic Mechanic of our shops began diagnosis and repair of the fire panel. (Note; Monday, October 14, 1991, as a Government holiday). Numerous jumper wires were installed by the Contractor which were unnecessary and complicated diagnosis. Mr. Caputo removed the jumpers and replaced two fire panel modules. The specific cause of the module failures was not identified; however, since the unit was bench tested prior to delivery, the modules were either damaged by Contractor actions or were a result of a manufacturer's defect. Mr. Caputo completed his repairs on the morning of October 16, 1991. The fire panel was connected to the central alarm control panel on October 17, 1991, by ADT. The Contractor made a verbal request that afternoon to schedule testing for Monday afternoon, October 21, 1991. Due to manpower, the testing could not be monitored until Tuesday morning, October 22, 1991. The Contractor never made written notification of testing 30 days prior to testing as required by the contract. See Section 16721, paragraph 11. of the Specifications. (AF, Tab 31.)

67. Appellant submitted a claim for delays associated with the installation of the fire alarm control panel by letter dated October 16, 1991. This claim was deemed denied because the contracting officer did not issue a decision relating to the claim within sixty days. (Complaint C3, Exhs. A, B.)

Breach of Contract Claim

68. FAR clause 52.232-5, Payments Under Fixed-Price Construction Contracts (APR 1989), set forth in the contract in full-text, provides a basis for the contracting officer to withhold and retain funds under this contract. Paragraph (e) of the clause, in pertinent part, provides the following authorization:

> However, if satisfactory progress has not been made, the Contracting Officer may retain a maximum of 10 percent of the amount of the payment until satisfactory progress is achieved. When the work is substantially complete, the Contracting Officer may retain from previously withheld funds and future progress payments the amount the Contracting Officer considers adequate for protection of the Government. (AF, Tab 1, p. I-SO.)

69. FAR clause 52.236-11, Use and Possession Prior to Completion (APR 1984), which was set forth in the contract in full-text, provides, at paragraph (a):

The Government shall have the right to take possession of or use any completed or partially completed part of the work. Before taking possession of or using any work, the Contracting Officer shall furnish the Contractor a list of items of work remaining to be performed or corrected on those portions of the work that the Government intends to take possession of or use. However, failure of the Contracting Officer to list any item of work shall not relieve the Contractor of responsibility for complying with the terms of the contract. The Government's possession or use shall not be deemed an acceptance of any work under the contract. (AF, Tab 1, p. 1-66.)

70. A punch list dated October 8, 1991, was provided to Appellant, which listed 33 deficiencies. A 25-page punch list dated October 18/24, 1991 was provided to Appellant which listed 224 deficiencies. The October 18/24 punch list was updated and provided to Appellant on November 12, 1991. (AF, Tabs 3F, 3L, 19.)

71. By internal memorandum dated October 25, 1991, the retainage was reduced from $34,988.40 to $25,000.00 because Appellant had resolved a number of deficiencies and because the contracting officer determined that it was no longer necessary to retain the larger amount. (AF, Tab 3G.)

72. By letter dated November 25, 1991, which was addressed to the contracting officer, Appellant requested, among other things, that the amount of money being withheld under the contract, then approximately $25,000.00, be reduced. Appellant asserted in its letter that:

> the as-built drawings and O&M manuals, which are nearing completion, are the only significant items now outstanding on this project, and the $25,000 in retentions is substantially excessive for these items. Since the project is now

substantially complete and is in the process of being occupied, continued withholding of the $25,000 retention violates the intent of the Federal Acquisition Regulation 52.232-5,paragraph (e). The total amount of retention should be reduced to a reasonable level
at this time. (Complaint C3, Exh. C.)

73. The contracting officer informed Appellant, by letter dated November 26, 1991,of FEMA's intent to take beneficial occupancy of Building 219A, except for Room Nos. 100, Vehicle Storage; 109 Covered Entrance/Loading Dock; and 111, Vestibule, effective November 21, 1991. The letter also stated that the Government's possession shall not be deemed as acceptance of any work under the contract. A list of thirty-three uncompleted and deficient items of work was attached to the letter, which stated that these items must be completed and accepted prior to contract completion and final acceptance. (AF, Tab 19.)

74. Throughout late 1991, several large dollar items required correction and/or installation, including the screen room, the overhead doors, the Operation and Maintenance Manuals and the As-Built Drawings. For example, Exhibit K to Complaint C3 is a December 4, 1991 letter from the contracting officer to Appellant concerning the requirements for the overhead doors. The letter identifies the requirements that Appellant failed to follow, specifies the fact that Appellant's submittals with respect to the door were rejected and never resubmitted by Appellant, and directs Appellant to perform the work. Another example is the project officer's November 21, 1991 letter which identifies problems with the screen room and points out that the screen room is not in compliance with Appellant' submittals. The screen room problems were not entirely resolved until March 13, 1992. (AF, Tab 18; Complaint C3, Exh. K.)

75. In a discovery response made by FEMA in early March, 1992, and which was entered into evidence at the hearing, FEMA then listed seventeen items of work which it characterized as incomplete or deficient. These items were previously listed in FEMA's letter to Appellant of November 26, 1991. The discovery response gave monetary values for these items totaling $17,754.00. The FEMA discovery response also listed seventeen deficiencies which had been corrected by Appellant on various dates between November 25, 1991 and February 20, 1992, but for which Appellant had not applied for payment. FEMA also stated in this discovery response that $6,562.00 was being retained at the direction of the contracting officer to cover liquidated damages. (FEMA's Answers

to Appellant's Second Interrogatories, Request for Admissions, and Request for Production of Documents.)

Acceleration Claim

76. Eden testified, and payroll records support his statement, that Appellant's personnel worked overtime throughout the project. The claim for acceleration begins on June 6, 1991, with Appellant's notice to the contracting officer that it had suffered delays attributable to the Government and that Appellant needed a forty-five day extension to the contract. By letter dated August 16, 1991, the contracting officer offered Appellant a bilateral contract modification for a no-cost twenty-one day extension of the contract performance period from August 16, 1991, to September 6, 1991. The modification extended the period of performance by fourteen days for the closing of the Atlantic pre-engineered product line at the Talapoosa, Georgia office, and seven days for the delay related to the insulated slab bolster requirement. The modification further stated that "No other elements presented at the meeting on July 11, 1991 are allowable delays, neither time nor costs will be considered." Appellant refused to sign the bilateral modification. A unilateral modification was issued on October 10, 1991. (Tr. 223-25, 721; AF, Tabs LB, lD, 2A, 24;
Complaint C3, Exh. F.)

77. Appellant computed his acceleration costs by taking the overtime hours worked by his hourly workers from June 6, 1991 to October 29, 1991. The total amount claimed is $2,519.71. (Complaint C3, Exh. C, Att. I; Tr. 230.)

78. At the inception of the contract, Appellant intended to hire only a few employees and intended for these employees to work overtime. Eden testified that "mhat was not necessarily required of us, but that was basically... the way we conducted our project.... [O]ur people worked a great deal of overtime, almost from the beginning on this project." (Tr. 231, 302, 372.)

79. Appellant's work load increased during this time-frame because a number of its sub-contractors defaulted. The painter defaulted on the project and Appellant's superintendent `became the painter." The drywall/insulation sub-contractor, Hart, defaulted and Appellant's own employees completed that work. Another subcontractor, Immer Drywall wrote Appellant on November 8, 1991, accusing Appellant of deficiencies and mistakes in performing the work. The letter states:

> Just to set the record straight, after your accusations that we were somehow partially responsible for your delays and failures at the FEMA site in Berryville, Virginia, please review the following:
>
> A) A letter sent in response to your silly letter of June 27, 1991.
>
> B) A copy of our Purchase Order showing that we stocked the majority of our material on 4-24-89.
>
> Further, you need to be aware that it is our contention that had the job site been completely ready for us, we would have been completely finished within five weeks after the initial stocking. This is shown by your payroll records. We should have been out by the first week in June 1991, as it was the insulation by you that was not properly done until the end of June 1991.
>
> * * * * *
>
> We have tried to work with you, but you have not responded in kind. Your mistakes caused us to have to reinstall many pieces of sheetrock and to do other work. We will not accept any offer that does not include full payment, including interest as required by the Miller Act.
>
> Please advise us as to the name and address of your bonding company, so that we may file a claim against the bond. (AF, Tab 3K.)

80. An analysis of Appellant's payroll records does not show an increase in the amount of overtime worked by Appellant's employees during the time period in question, when compared to the period October, 1990 through May, 1991. 262 overtime hours were worked by Appellant's labor force in those 32 weeks, approximately 8.2 hours per week. During the weeks of June 8, 1991 through the week ending November 2, 1991, 168 overtime hours were worked in those 22 weeks, for an average of about 7.6 hours per week. In August, 1991, Appellant's labor force was reduced from a superintendent and three laborers down to a superintendent and one laborer. (AF, Tab 24.)

Discussion

Screen Room Chances Claim

Appellant argues that in using an "or equal" specification for the screen room, FEMA indicated its willingness to accept a screen room that was the functional equivalent of the name brand product, the Lindgren Model 22. Appellant argues that it offered to furnish two screen rooms to FEMA, which were functionally equivalent to the Lindgren Model 22, that FEMA wrongfully rejected these products, and that FEMA ordered it to supply the Lindgren Model 22. Appellant asserts on these grounds that it is entitled to an equitable adjustment in the contract price in the amount of $8,540.00, the difference in price between the USC Model 44 and the Lindgren Model 22.

The Government argues that FEMA properly rejected the TEC and USC Model 44 screen rooms because none of Appellant's submittals established that these screen rooms met the functional equivalence of the Lindgren Model 22. The first question to be resolved is whether the Government properly rejected the TEC and USC screen rooms. We conclude that it did, and deny this claim.

There is no question that the contracting officer could reject an alternate product if, in the proper exercise of discretion, he determined that the alternative was not the equal of the specified product. The term, "or equal" in the specification does not mean that the substituted product has to be identical to the specified one. The alternate item must meet the quality aspects of the specification and must be the functional equivalent of the specified product. It need not match it in every detail. Bruce-Anderson Company, Inc., ASBCA No. 29411, 88-3 BCA ¶ 21,135.

The functional requirements for the screen room were clearly set forth in the specification, which, in relevant part, required a double electrically isolated prefabricated shielded enclosure equal to Standard Model 22 as manufactured by Lindgren. The enclosure was to be of bronze screen wire. The attenuation characteristics of the enclosure were not specified. The electrical filters were required to have a frequency range of 150 kHz-1O gHz and a minimum attenuation range of 120 dB.

Appellant's first proposed substitute, the TEC screen room, was for a solid steel screen room, not wire mesh. It did not meet the minimum attenuation requirement of 120 dB in the electrical range and for the filters. Appellant was informed of these deficiencies, among others, in written comments by the project officer dated April 2, 1991, made only four days after the date of the TEC submittal. Appellant waited several weeks before

forwarding a letter to FEMA from TEC, dated April 23, 1991, without comment, request or instruction. The TEC letter responded to FEMA's comments and claimed generally that TEC could meet all of the requirements of the specification, except for the double electrically isolated feature, because that feature was patented by Lindgren. However, no submittal documents, specifications or other detailed information was provided to support any of the general statements made by TEC. The FEMA project officer responded to the TEC letter by memorandum dated May 2, 1991. The memorandum stated that any submittal must be verified and certified by Appellant that the screen room complies with the contract requirements. Appellant never submitted a verification and certification with respect to the TEC screen room. Appellant's submittals with respect to the TEC screen room failed to demonstrate that the product met the performance levels specified in the contract. While the contracting officer has discretion in determining whether the alternate product is the equal of the prescribed product, the discretion is not absolute and must be reasonably exercised. Bruce Anderson, Id. We conclude that the rejection of the TEC screen room was a proper exercise of discretion, based on the information that was presented to FEMA in Appellant's submittals.

Because of the difficulties that Appellant was encountering with respect to the screen room requirement, by letter dated June 7, 1991, FEMA requested that Appellant submit a deductive proposal for the screen room. Appellant responded by deductive proposal dated July 3, 1991, which proposed the deletion of the USC screen room at a cost of $14,409.00. The deductive proposal was properly rejected by the contracting officer by letter dated July 18, 1991, on the grounds that there was no evidence that Appellant had even bid that amount. The evidence establishes that the only bid which Appellant had received prior to bidding on the contract was a quote from Lindgren in the amount of $17,803.00. The July 18 letter also properly directed Appellant to supply the Lindgren Model 22, or equal, because Appellant had not demonstrated that the TEC screen room was functionally equivalent to the Lindgren Model 22.

Appellant's second proposed equal product, the USC Model 44 screen room was also properly rejected. Appellant's USC Model 44 submittal failed to demonstrate on its face that the enclosure could meet the 120 dB attenuation requirement in the electrical field (14 Khz), the proposed filter clearly did not meet the 120 dB attenuation requirement, and a certification was not provided showing that the filters met the minimum CPS rating of 0-400 Hz over the specified frequency range.

The evidence establishes that Appellant intentionally made incomplete screen room submittals because it was uncertain whether FEMA would accept the alternative products. It was a serious mistake of judgment for Appellant to make incomplete submittals, because the evidence indicates that both TEC and USC could probably have provided the necessary documentation to Appellant at little or no expense, and there is some evidence in this case which indicates that TEC and USC might well have been able to meet the Government's requirements. Having chosen to make incomplete submittals, Appellant bore the risk of rejection. Although Appellant went to great lengths at the hearing to establish that the TEC and USC screen rooms could have met or even exceeded the performance of the Lindgren Model 22, this evidence is not persuasive at this juncture, because it was not presented to the contracting officer for her consideration. The issue in this case is whether the rejection of these products by the contracting officer was a proper exercise of discretion based upon the information presented to her by Appellant at that time. We find that it was.

Compensable Delay Claims

The Suspension of Work Clause (APR 1984), FAR 52.212.12, set forth in the contract, states, in relevant part that:

> (a) The Contracting Officer may order the Contractor, in writing, to suspend, delay or interrupt all or any part of the work of this contract for the period of time that the Contracting Officer determines is appropriate for the convenience of the Government.
>
> (b) If the performance of all or any part of the work is, for an unreasonable period of time, suspended, delayed, or interrupted (1) by an act of the Contracting Officer in the administration of this contract, or (2) by the Contracting Officer's failure to act within the time specified in this contract (or within a reasonable amount of time if not specified), an adjustment shall be made in the cost of performance of this contract (excluding profit) necessarily caused by the unreasonable suspension, delay, or interruption, and the contract modified in writing, accordingly. However, no adjustment shall be made under this clause for any suspension, delay or interruption to the extent that performance would have been so suspended, delayed or interrupted by any other cause, including the fault, or negligence of the Contractor, or for which an equitable

adjustment is provided for or excluded under any other term or condition of this contract.

A contractor carries its burden of showing that it was delayed in contract performance if it demonstrates that work on an item on the critical path was delayed by an act of the Government. JRR Construction Co., Inc., DOT BCA No. 1838, 88-3 BCA ¶ 20,905. In order to establish that the Government is the sole proximate cause of the delay, the contractor must show the absence of concurrent grounds for delay which would have equally delayed the time of completion of the contract. Coffey Construction Company, Inc.,VABCA Nos. 3361, 3432, & 3473 (Feb. 11, 1993), citing Merritt-Chapman & Scott Corp. v. United States, 528 F.2d 1392, 1397 (Ct. Cl. 1976) (where major obstacles confronting proof of Appellant's claim were the existence of various concurrent delays which contributed to its later than planned contract completion date). The Court of Appeals for the Federal Circuit, in William F. Klingensmith v. United States, 731 F.2d 805, 809 (Fed. Cir. 1984)
stated:

> The general rule is that "[w]here both parties contribute to the delay neither can recover damage[s], unless there is in the proof a clear apportionment of the delay and expense attributable to each party." Courts will deny recovery where the delays are concurrent and the contractor has not established its delay apart from that attributable to the Government. Blinderman Construction Co., Inc. v United States, 695 F.2d 552, 559 (Fed. Cir. 1982), quoting Coath & Goss, Inc. v. United States, 101 Ct.Cl. 702, 714-715 (1944).

Where the delay is prompted by inextricably intertwined concurrent Government and contractor causes, the delay is not compensable nor are liquidated damages assessable. Kirk Brothers Mechanical Contiuctors, Inc., ASBCA No. 43738 1992 WL 197581 (Aug. 6, 1992).

With these principles in mind, we must now determine the reasons why various delays occurred in the completion of the project and to whom the delay should be attributed.

Screen Room Delay Claim

Appellant has failed to carry its burden of proof that the rejection of the TEC and USC screen rooms was an abuse of discretion by the contracting officer. Moreover, FEMA's rejection of these proposals was accomplished in timely fashion without

undue delay. The rejection of the proposed screen rooms was caused, in substantial part, by Appellant's incomplete submittals, by Appellant's failure to obtain sufficient information with respect to screen rooms prior to making its offer to perform this contract, and by Appellant's unreasonable deductive change proposal. In the absence of evidence of Government fault, we deny the appeal of this claim. See, JRR Construction Co., Inc., DOT BCA No. 1838, 88-3 BCA 20,905.

Foundation Design Delay Claim

Appellant claims that the Government is responsible for a twenty-one day delay in completing the foundation work. Appellant argues that as FEMA accepted the design change recommendations of Appellant's structural engineer without objection, and as no question was raised concerning the necessity of the change, then the Government should be held responsible for any delays to the project resulting from these changes. We disagree.

It is Appellant's burden to establish by a preponderance of the evidence that it was delayed by an act of the Government. In order to establish Government liability for any delay attributable to the foundation design change, Appellant must establish, as a threshold issue, that the Government design was defective. The testimony of the Government's expert, Zebarth, was definitive and highly probative on this issue. His testimony conclusively establishes that the Government design was not defective. The mere fact that the Government permitted Appellant to make this design'bhange does not establish, *ipso facto*, that the Government design was defective, nor does it establish Government fault. We, accordingly, deny this claim for lack of proof.

Security Delay Claim

Appellant claims that the Government changed security procedures at the site from the procedures that it followed during two prior contracts, and that, as a result, the Government is directly responsible for delays that Appellant experienced in completing the concrete work involving the footings and the foundation. Specifically, Appellant argues that the Government's security officials often took ten or more days to conduct security checks necessary for employee access to the site, and that this did not occur under two prior contracts with identical security provisions at this site. Appellant also argues that the Government excluded non-citizens from the site during the performance of this contract, and that the Government had not done

this under the two previous contracts. We note at the outset that the contract security provisions in the subject contract do not refer to non-citizens.

We find Appellant's arguments unpersuasive for the following reasons. First, contract clause H. 1 does not guarantee that security checks will be completed within ten days; it provides that it is the duty of the contractor to anticipate personnel needs so that the security officers would have "at least ten days for applicant review." See Jordan & Nobles Construction Co., GSBCA Nos. 8349 et al., 91-1 BCA ¶ 23,659 (where the Government's failure to approve a construction contractor's submittals within ten days of submission did not entitle the contractor to additional compensation for delay because the contract provision that the contractor was to submit shop drawings to permit "no less than ten working days for checking and appropriate action" imposed an obligation on the contractor, not the Government). The record simply does not establish that the Government was unreasonably slow in reviewing applicants under the security procedures. Under the circumstances, we do not find this argument persuasive.

Even if we accept Appellant's allegation regarding FEMA's refusal to let non-citizens on the site as true, there is insufficient evidence in this case that either Appellant or any subcontractor was actually delayed in the performance of work as a result of the refusal. Nevertheless, other than broad general statements, Appellant has produced no evidence which establishes that delays actually occurred as a result of the exclusion of non-citizens from the site. No witnesses other than Eden and Mohr were called to establish this fact, and there is no documentary evidence which establishes that any delays actually occurred. Appellant has failed to prove that the increased security measures created any measurable delay. It is for these reasons that we deny this claim.

Gutter Design Delay Claim

Appellant seeks extended overhead for seven days of delay which it alleges occurred when it installed PVC piping under the slab. Appellant asserts that the delay arose from an alleged design defect attributable to FEMA, with respect to the design of a gutter and downspouts. Appellant contends that design changes to the gutter were necessary, because a 16-foot dimension on one of FEMA's drawings was insufficient to contain all of the building components required to be within that dimension, including the gutter at issue. Appellant further contends that the FEMA specified gutter was neither typical for its location on the

building, nor able to support the weight of snow and ice that would accumulate in it, nor able to carry the required amount of rainfall. Appellant recommended to FEMA that a wider gutter with greater capacity be substituted for the FEMA specified gutter, that the gutter be moved out of the 16-foot dimension at issue and into the adjacent 50-foot dimension to give the wider gutter sufficient support, and that the downspouts be moved to the interior of the building to prevent draining water from freezing in the drains. FEMA ultimately approved the request, but refused to grant Appellant any delay costs on the grounds that the problem was not the result of a defective design, but arose from Appellant's anchor-bolt placement. Appellant denies that the anchor-bolt placement caused the problem. Appellant asserts that seven days were needed to complete extra work associated with installing PVC drain pipes under the slab in the interior of the building. We find this claim lacking in merit.

In order to recover for delays, a contractor must demonstrate that its performance was actually delayed through fault of the Government; a contractor carries its burden of proof that it is entitled to compensation for delay by demonstrating that an item on the critical path to job completion was delayed by the Government. Fischbach & Moore Internationol, ASBCA No. 18146, 77-1 BCA ¶ 12,300. The only evidence that Appellant's performance was delayed is Eden's testimony that the project was delayed by seven days as a result of the gutter re-design and installation of the down spouts. In this respect, Appellant requested a seven-day extension of time on the contract for work related to the installation of the interior downspouts, including the "cost involved in putting in the PVC piping under these slabs." Appellant failed to establish that the work at issue would take seven days to complete, that the work actually took seven days to complete, or that the project was actually delayed for seven days or any other period of time as a result of the gutter design change. Although Appellant asserts that it delayed delivery of the pre-engineered steel for fourteen days until changes had been approved for the gutter, Appellant has not established that delivery of the steel had to be delayed, in whole or in part' because of the re-design of the gutter. To the extent that any delay in delivery of the steel might have occurred with respect to the gutter re-design, part of that delay is clearly attributable to Appellant's failure to make complete submissions. Appellant's first gutter-related submission, dated November 30, 1990, was rejected on December 6, 1990 with respect to the gutter detail because it contained no downspout and gutter sizes and was lacking in backup calculations showing drainage capacities. Appellant's second gutter-related submission, dated January 8, 1991, was

rejected, on January 11,1991, in relevant part, because it contained no downspout and gutter sizes and again contained no back-up calculations showing drainage capacity requirements. Both of these submissions also required numerous other drawing-related changes that had nothing to do with the gutter detail which could have impacted upon the delivery of the steel. A complete, acceptable submission was made by Appellant on January 29, 1991; it was approved two days later on January 31, 1991.

In addition, Appellant has failed to demonstrate that the design change was necessary, as opposed to desirable. We do not find the testimony of Appellant's architectural expert compelling with respect to the drainage characteristics or load-carrying characteristics of the gutters at issue because the expert's opinion with respect to both the original and the alternative gutter designs was a conclusion that was not supported by evidence demonstrating how he arrived at the conclusions. Appellant made numerous statements in its complaint in this matter which indicate that the building manufacturer's engineers also believed that the original gutter design was defective. Appellant asserts in its complaint that the manufacturer would not build to this design. There is no evidence in this case to support that the manufacturer took this position. The only evidence in the record going directly to this issue is a letter from the building manufacturer dated January 22, 1991, addressed to Appellant, which indicates that the gutter was moved to accommodate certain dimension lines specified by Appellant. There is no evidence from the manufacturer that the original design had insufficient drainage capacity, and that letter corroborates the Government's position that the problem and any attendant delay was caused by Appellant's anchor-bolt placements.

For the foregoing reasons, we find that the original gutter design was not defective. Assuming, arguendo, that the design was defective, we find inextricably intertwined concurrent delay on the part of Appellant, which would render losses arising from any government-caused delay not compensable. Kirk Brothers Mechanical Contractors, Inc., ASBCA No. 43738, 1992 WL 197581 (Aug. 6, 1992). We deny this claim.

Weather Delay Claim

Appellant argues that weather delays became a problem, not because the weather was unusually severe in the winter of 1990-91, but because it was forced to pour concrete in a later time-period than it should have, had there been no delays. Appellant argues that:

> Although it was difficult to ascribe specific numbers of days of delay to any one category in the first few months of the project, the FEMA-caused delays related to design changes and security procedures, as well as the weather (which would not have occurred but for FEMA's delays forcing Plandel to pour concrete later than intended), combined to put Appellant 31 days behind schedule as of January 21, 1991; an additional 11 days of delay occurred between January 22 and February 15, 1991, resulting mostly from the gutter design changes and some additional weather problems.

Appellant has failed to carry its burden of proof that it is entitled to compensation for delays due to weather. First, Appellant failed to demonstrate actual delay. There is no evidence relating the weather conditions to the type of concrete poured, and hence no evidence that any cure-period was lengthened by colder or wetter weather. Second, as we have denied Appellant's claims for delays which it attributes to design changes, security procedures, and the gutter re-design, we deny this claim, which is predicated on these other claims. We deny this claim for lack of proof.

Slab Bolster Delay Claim

Appellant argues that there is no disagreement that installation of the insulated slab bolsters constitutes a Government-caused delay, because the Government granted a seven-day extension of time relative to this claim. We find this argument to be without merit and deny this claim for a number of reasons.

First, the granting of an extension of time does not, ipso facto , establish Government fault; several other possibilities may be inferred from this fact, including, but not limited to, the possibility that the contractor encountered an excusable delay that was neither party's fault, or the possibility that the Government was willing to grant a period of delay, notwithstanding contractor fault. Second, there is no evidence that Appellant was ordered to use slab bolsters by the Government. The decision to use slab bolsters appears to have been jointly reached by the parties upon the first "disastrous pour" of concrete. The utilization of slab bolsters represented a reasonable and inexpensive solution to a severe problem, which was not attributable to Government fault, but to the incompetence of the concrete subcontractor. Under the circumstances, Appellant was

thrust into this situation through the fault and negligence of its subcontractor, and Appellant cannot, under the Suspension of Work clause, recover for delays to which it contributed. Jordan & Nobles Construction Co., 91-1 BCA 23,659 at 105,689. Appellant also has not established that it had any better or more efficient mechanism to put into place to resolve the problems encountered during the first pour, and has not established that it could have avoided the alleged delay, but for certain acts or omissions by the Government. Third, there is insufficient evidence in this case to establish actual delay. Eden's testimony that the project was delayed for seven days because it took seven days to obtain insulated slab bolsters is contradicted by his testimony that work on the critical path continued to be performed during this time period, and the concrete pour was not on the critical path. See Jordan & Nobles Construction Co., Id. Moreover, there is no objective evidence to corroborate Appellant's assertion that it took seven days to obtain insulated slab bolsters; such evidence simply was not presented.

Drywall and Insulation Delay Claim

Appellant's drywall and insulation delay claim is comprised of two issues: (1) the height of the fire-rated gypsum board; and (2) the method for installing the insulation. Both issues turn on the contractor's duty to inquire and to continue performance.

Appellant argues that it is entitled to delay costs for twenty-one days because the contracting officer took an unreasonable period of time in which to decide these issues. For the following reasons, we deny the appeal of this claim.

Under the disputes clause of the contract, Appellant was duty bound to continue performance during the pendency of a dispute. Where there is a reasonable request for clarification, a contractor need not continue to perform or to inform the Government that work has stopped so long as such a stoppage could be reasonably anticipated. Such situations, however, are limited to circumstances where it is reasonable and necessary to stop work, e.g., good faith allegations of impossibility of performance, Milwaukee Transformer Co., ASBCA No. 10814, 66-1 BCA ¶5570, or severe cost impact. Monitor Plastics, ASBCA No. 11187, 67-2 BCA ¶ 6408. The circumstances in the case before us which allegedly justified work stoppage were extremely minor, both in terms of cost impact and in terms of impact upon Appellant's operations. Eden admitted that it would only have taken one or two days to perform the work at issue and that the cost of this extra work was about $1,000.00. While we agree that the

contracting officer did not expeditiously provide a written response to Appellant, the alleged changes were so inconsequential that we find it unreasonable that Appellant stopped work pending receipt of a directive from the contracting officer. In addition, Appellant's interpretation of the insulation specification was unreasonable, because it ignored the vapor barrier provisions of the specification, which immediately followed the installation language. The vapor barrier provisions of the specification required explicitly that the tabs of the insulation be fastened to the face of the framing members. Such "fastening" did not occur with the friction fit method. Thus, to rely on the manufacturer's directions for installation alone was not sufficient to satisfy the vapor barrier requirements, which clearly made taping or some method of fastening necessary. See RJS Constructors, Inc., ENG BCA No. 5795, 1993 WL 133049 (Feb. 24, 1993) (where an interpretation which considers only part of the specification and ignores other relevant parts is unreasonable). Appellant did not need the contracting officer's guidance to proceed. The work was not "constructively suspended" by the project officer, as Appellant alleges, when the project officer directed Appellant to comply with the contract specifications; Appellant simply refused to proceed further based upon an unreasonable interpretation of the contract specifications.

Fire Alarm Control Panel Delay Claim

Appellant argues that, but for a defective piece of GFE, it could have been finished with the installation of the fire alarm system by October 14, 1991. Instead, the installation of this GFE was completed on October 22, 1991. Appellant argues that the eight-day difference resulted directly from the defective GFE. Appellant argues that since the contract was virtually complete at this time, except for punch list items, this work was a critical path item and that Appellant is therefore entitled to a compensation for costs incurred as a result of this eight day delay.

The Government argues that Appellant was not delayed by this occurrence, because the contract work was not complete at the time in question, as evidenced by the fact that Appellant continued to perform other work under the contract for a long period thereafter. The Government also argues that Appellant has not established that it experienced a delay as the result of this occurrence. We concur with the Government and deny this claim for the following reasons.

Appellant admits in its complaint that it had a substantial amount of work to complete on October 22, 1991, and that two of its employees were still working on the contract through November 23, 1991, because the painting subcontractor defaulted on his subcontract and refused to return to the job site. There is also evidence that Appellant's employees were performing other tasks under the contract during this time period. While the evidence is sufficient to establish that as a result of the defective GFE, the electrical subcontractor had to perform the installation of the fire alarm control panel over a longer period than originally anticipated, this evidence does not establish, ipso facto , that the project was delayed by eight-days. General statements that the contractor suffered delay are not sufficient proof that a delay occurred; especially in those instances where there is an absence of contemporaneous documentary evidence of the disruptive effects to the work. *R. W. Contracting, Inc.*, ASBCA No. 24627, 84-2 BCA ¶ 17,302. Appellant failed to introduce into evidence any manning charts, work schedules, or any other contemporaneous documents to support this delay claim or any of its delay claims. There is no evidence that Appellant's performance on the contract was delayed by the defective GFE, other than the testimony of Eden and Mohr, which is unsupported by contemporaneous documentary evidence. We deny the appeal of this claim.

Breach of Contract Claim

Appellant asserts in its brief that FEMA breached its implied duty to cooperate by:

(1) failing to respond in a reasonable time-frame to numerous requests for guidance and approval; (2) failing to issue final decisions on Appellant's claims; and (3) by either ignoring or acting slowly upon other requests made by Appellant during performance of the contract. This breach claim is not properly before us, because it was not presented to the contracting officer for a final decision. Our jurisdiction is limited to consideration of appeals arising from final decisions of contracting officers. Accordingly, the only breach claim which we can properly consider is Appellant's retainage claim, because it was submitted to the contracting officer for a final decision by letter dated October 16, 1991, and deemed denied by her failure to issue a final decision within sixty days.

Appellant asserts that FEMA's retention of approximately $25,000.00 subsequent to completion of the contract is in violation of the Payment Clause of the contract. Appellant further asserts that it was unreasonable for FEMA to retain this

sum after November 25, 1991, because FEMA had occupied part of the building, because FEMA was also at that time using other parts of the building which it had not accepted, because most of the punch list items were complete, and because FEMA was slow in providing Appellant with information that was necessary to complete a number of other items on the punch list.

The Government asserts that the retainage amount was reasonable to assure the completion of the contract, that FEMA did not breach the contract, and that the record is replete with evidence as to the rationale and justification for the retainage. We agree with the Government's position on this issue and deny this claim.

FEMA's authority to withhold payments is found at FAR clause 52.232-5, which was set forth in full-text in the contract. Under FAR clause 52.232-5 (e), the contracting officer was authorized to withhold funds subsequent to substantial completion in the amount that the contracting officer considers adequate for the protection of the Government. FEMA also possessed the implied right to withhold payment for the cost of correcting defective work. Building Maintenance Specialist, Inc., ENG BCA No. 4115 83-2 BCA ¶ 16,629. There is evidence of sufficient correlation between the amounts withheld and the reported discrepancies. The amount withheld was only 2.5% of the contract price, and the evidence establishes that the bulk of the reported deficiencies existed. We also note that the contracting officer released retained funds as deficiencies were corrected. There is also evidence that major problems existed with respect to the performance of the screen room which were not corrected until March, 1992. Based upon this evidence, we find that the contracting officer was acting properly within her discretionary authority when she withheld the money at issue pending correction of the deficiencies.

Acceleration Claim

Appellant argues that it is entitled to $2,519.71 in acceleration costs incurred between June 6, 1991 and October 29, 1991. The costs at issue are overtime costs incurred by Appellant for its employees during that time frame, and which Appellant asserts are attributable to the delays which are the subject of this appeal. Appellant argues that because the Government either refused to grant it an extension of time for such delays when it should have done so, or did not do so during the period of performance, there is a compensable acceleration of performance. The Government argues, among other things, that Appellant has not established its acceleration claim because the evidence is

insufficient to establish an acceleration order and because Appellant has not established a nexus between the delays alleged and the expenses incurred. We agree with the Government on this issue and deny this claim for the following reasons.

A number of elements are necessary to establish a claim of constructive acceleration, including: (1) one or more excusable delays; (2) notice by the contractor of such a delay; (3) denial by the Government of a time extension; (4) conduct by the Government amounting to an order to accelerate work; (5) notice by the contractor that such order is regarded as a constructive change order; and (6) the incurrence of extra acceleration costs. Cuneo & Ackerly Acceleration, Government Contracts Monograph No. 9 (1965). We find no evidence in this case of Government action sufficient to indicate a requirement for accelerated performance. There is no evidence of a direct order to accelerate, or threats of default at any time during performance, and no course of conduct during performance sufficient to establish a requirement for accelerated performance, e.g., issuance of substantial change orders by refusal to allow time extensions for delays resulting from such changes, Farnsworth & Chambers Co., lnc., ASBCA No. 7130, 1962 BCA ¶ 3499. There is also no evidence of causal connection between the claimed extra costs and the alleged attempt to speed up completion. The mere fact that overtime hours were incurred during this time-frame, does not establish such a connection, particularly in the absence of evidence establishing an increase in overtime during this time period. The evidence, if anything, establishes that Appellant's overtime decreased slightly during this time period when compared to the average overtime incurred during contract performance. Furthermore, Appellant planned at all times to use substantial overtime to perform the contract, and, indeed, only fielded a skeleton staff of its own workers, who apparently were unable to keep

up with the contract requirements, including the requirement to maintain contemporaneous documentation of alleged changes and delays. We attribute any overtime costs incurred in this contract to be overwhelmingly attributable to Appellant.

Conclusion

We conclude that Appellant is not entitled to be reimbursed for claims based on changes, delays, acceleration, or breach of contract. We deny these claims.

HUD BOARD OF CONTRACT APPEALS

_____
Timothy J. Gresko
Administrative Judge

Concur:

_____
David T. Anderson
Administrative Judge

_____
Jean S. Cooper
Administrative Judge